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COMMENT



Hope as a bridge to post-traumatic growth

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Abstract

Post-traumatic growth (PTG) has been characterized as the subjective appraisal of growth, or personal development, following a confrontation with an array of high-impact challenges in life (Psychol Inq 15:1–18, 2004). Song et al. found that patients with cancer may be described by three profiles with regard to symptom burden and PTG. We are particularly interested in what their analyses reveal about the relationship between optimistic attitude and PTG (Supportive Care in Cancer, 2024). Furthermore, we propose that "hope" rather than "optimism" be the focus for clinicians who seek to channel the trauma associated with malignant disease towards PTG.

than hope.

Keywords Hope · Optimism · Goals, Pathways, Agency · Hope-augmentation

Post-traumatic growth (PTG) has been characterized as the subjective appraisal of growth, or personal development, following a confrontation with an array of high-impact challenges in life [1]. The article by Song et al. [2], which appears in this issue of *The Journal*, employed latent profile analysis (LPA) techniques to define three classes of post-traumatic responses (i.e., Resisting Group; Struggling Group; Growth Group) among 329 patients who were treated for a variety of cancers in Shandong Province, China. We were intrigued by several findings.

First, higher levels of disease symptoms as well as higher levels of disease distress were both associated with greater PTG (Table 2 of their article). This observation—consistent with the experience of other investigators who have previously documented that people can blossom as a result of trauma [3]—is a valuable reminder to oncologists that even though patients may experience growth, symptom burden will not *ipso facto* dissolve. It is reassuring to know that growth is available to traumatized populations, but we dare not lull ourselves into complacency which suggests that helping someone grow makes everything better.

Second, Song et al. [2] found that the likelihood of having at least 3 children was higher in the Struggling Group than in the Growth Group. The authors acknowledged that children family dynamics of the cancer journey.

Third, and perhaps most surprising, participants with high symptom burden and moderate-to-high PTG were more likely to exhibit less optimism. We are curious about this pattern of results, which the authors hypothesize could be due to an interaction among variables. That is, they speculate that the presence of low levels of optimism may amplify patients' concern about the severity of their disease and thus increase their symptom burden. Ultimately, we could only lament the fact that the study team elected to explore

optimism as their positive expectancy variable (PEV) rather

have the potential to consume vast resources and thus can contribute to the financial toxicity (i.e., problems arising for

patients which relate to the costs of medical care) of cancer

and its treatment or, conversely, they can provide meaning-

ful social support. It is unfortunate that the data were not

displayed as a function of the age of the children. Given that

age (e.g., adult vs. child) may have made a difference in the

"dependency" of the offspring, we believe this would enable

readers to better decipher the impact of descendants in the

Although hope and optimism are sometimes used as synonyms in common parlance, they are not the same. In the scholarly literature, optimism is often defined as a generalized positive belief about future outcomes. It is somewhat agnostic to whether or not individuals, families, or groups take actions to bring about these outcomes [4]; the expectancy is simply that positive things will occur. Hope, in contrast, refers to a cognitive construct that manifests when

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three conditions are met: goals (which are best if purposeful and plausible); pathways to reach those goals (i.e., plans or strategies); and agency (i.e., determination or motivation) to embark on those pathways [5]. As such, hope involves a belief in the utility of intentional action to bring about goals and may thus be described as more "empowering."

On a practical level, this means that physicians viewing patients through the lens of optimism may feel more obligated to "cheer patients up," whereas those viewing patients through the lens of hope may feel freer to explore the realistic implication of cancer for patients' goals, plotting ways forward given the vicissitudes of the medical situation. Since hope is potentially relevant to all areas of individuals' lives, this goal-setting conversation is likely to reach beyond goals for care, encompassing goals for life, together with their concomitant pathways and sources of agency.

Validated instruments are now available to measure and monitor hope [6, 7]. Moreover, in a wide spectrum of settings—ranging from patients with cancer to earthquake survivors to displaced refugees—hope serves as a bridge

between these respective traumas and PTG [8–13]. To date, the relationship between hope and post-traumatic growth has been documented in a largely descriptive fashion, demonstrating naturally occurring relationships between these two phenomena in diverse samples. However, we wonder if clinical utility could be derived from testing whether people who have been thrust into trauma could learn to be more hopeful by way of hope-based interventions. In a recent study of 128 women with breast cancer treated in Ghana, Ofei et al. [14] used structural equation modeling to demonstrate a positive association between a variety of psychosocial factors (e.g., hope, social support, religiosity, optimism) and PTG. Those authors advocated, where possible, for interventions to focus on malleable psychosocial factors in order to help survivors cope better. Hope could thus be harnessed as a skill which might be learned and practiced. Indeed, interventions to augment hopefulness have been emerging in a systematic fashion [15].

Hope enhancement interventions, once requiring dozens of hours, have evolved into convenient in-person "workshop"





Fig. 1 An example of a smartphone app (i.e., Hopetimize) that can be used to minimize dependence on in-person workshops for hope enhancement while simultaneously enabling dissemination of this skill



sessions that can also be conducted through virtual formats aided by smartphone applications and self-directed learning modules [16]. There is even reason to believe that hope may mediate some of the aforementioned difficulties arising from financial toxicity (Smith GL, Feldman DB, Corn BW; manuscript in preparation). The harmonization of such intervention principles with emerging technologies (Fig. 1) will allow clinicians to determine where hope enhancement strategies may be most relevant, and in turn, how to scale up the benefits established.

It should be noted that hope, like most psychological constructs, is influenced by cultural context. Many scholars have noted that the model of hope discussed here (often referred to as "Hope Theory") has been shaped by Western individualistic notions of goal achievement [17]. Thus, when applying interventions related to hope and similar constructs across cultures, it is essential that investigators engage in a process of cultural adaptation. In this regard, we celebrate that Song et al.'s sample emanates from Shandong Province, China. Further hope (and optimism) research should be done utilizing samples cross-culturally culled from around the globe as well as incorporating diverse samples within nations like the USA.

We have previously written that hope has value in somber times, both inside and outside the context of serious illnesses such as cancer, and we abide by the proposals we offer in those circumstances [18]. Meanwhile, significant strides have been made by the oncologic community to destignatize cancer so that patients and family members can find ways to live alongside this set of diseases [19]. The work of Song et al., however, refreshes our memories and compels us to reckon with the inescapable reality that a diagnosis of cancer still constitutes a source of trauma for many of those we care for in our clinical practices. This truth behooves us to tend to a range of post-traumatic needs that span disrupted sleep hygiene to anxiety to depression to other psychological burdens including hopelessness. The good news is that, even in the midst of suffering, many patients realize a relatively high state of post-traumatic growth. We respectfully urge the scientific community to rigorously determine how best to summon hope to pursue this most worthy of goals.

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Data availability No datasets were generated or analysed during the current study.

Declarations

Conflicts of interest The authors declare no competing interests.

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